

Exhibit H

Supplemental Expert Disclosure – Joseph R. Mason, Ph.D.

(January 31, 2024)

The Government hereby supplements the December 8, 2023 notice (the “Initial Mason Notice,” attached as Exhibit A) regarding the anticipated testimony of Joseph R. Mason, Ph.D. As previously disclosed, Dr. Mason is an expert in trade execution, portfolio management, and equity valuation, as further described below.

This supplemental notice adds further detail to the matters previously described in the Initial Mason Notice, namely by including by identifying relevant bases for opinions and by providing more detail about those opinions. Except where specifically noted, this supplemental notice does not intend to relinquish any subject or anticipated testimony previously described. This supplemental notice also does not recite Dr. Mason’s qualifications, which are described in the initial notice and in his *curriculum vitae*.

Background Materials and Concepts

1. As described in the Initial Mason Notice, Dr. Mason will make use visual illustrations and graphs. A collection of draft graphs and tables is collected in Appendix A.

2. In addition to the background concepts previously disclosed, Dr. Mason will explain “volume” and “liquidity” as they relate to equity and swaps trading. Specifically, Dr. Mason will opine that “volume” of trading in a stock refers to the number of shares traded on a periodic basis. Dr. Mason will further opine that a stock’s “Liquidity,” which reflects the ability to buy or sell a stock in a timely manner and receive in exchange a price reflective of the value, is related to the stock’s volume. Zvi Bodie, *Essentials of Investments*, 11th Ed., McGraw Hill; John Hull, *Options, Futures, and Other Derivatives*, 10th Ed., Pearson.

3. As previously described in the Initial Mason Notice, Dr. Mason will opine that it is not standard to undertake a results-driven valuation analysis. Adjusting the parameters in a DCF model to produce a desired output is an example of results-driven valuation analysis. Dr. Mason will further opine that in the absence of new information about a firm, market movements in the price of a firm’s security would not justify a significant change to a DCF valuation of the firm. After all, one objective of DCF analysis for an investor is to identify whether the intrinsic value of the firm is above or below the value implied by its stock price.¹

4. Dr. Mason bases his opinion about results-driven DCF analysis on his professional experience with security valuations as well as industry guidance, such as that published by The Society of Chartered Financial Analysts (“CFA”). The CFA’s 2022 “Market-based Valuation,” for example, explains how to determine value based on forecasted fundamentals, which it describes

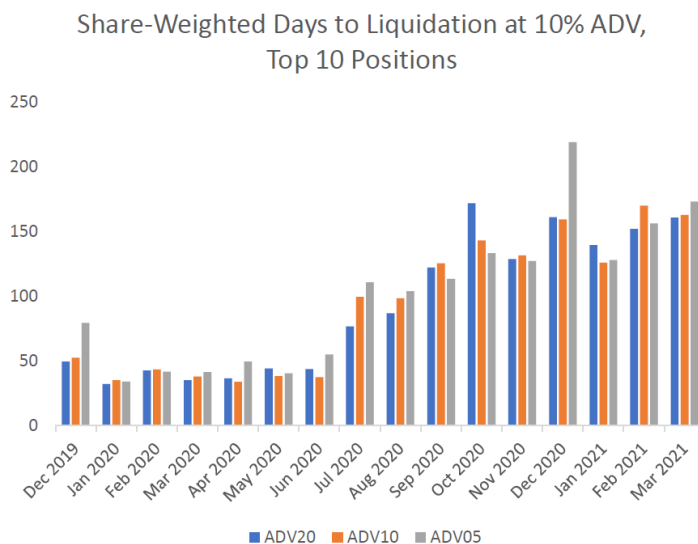
¹ Jerald E. Pinto, et al., *Market-Based Valuation: Price and Enterprise Value Multiples*, (2022), pp. 5, 18, 58-59; *see generally* Jeffery S. Abarbanell, et al., *Abnormal Returns to a Fundamental Analysis Strategy*, (Aug. 1997); Jeffery S. Abarbanell, *Fundamental Analysis, Future Earnings, and Stock Prices*, *Journal of Accounting Research* (Spring 1997).

as the “characteristics of a business related to profitability, growth, or financial strength.”² The CFA’s guidance further explains that DCF models can be used to find the value of a stock.³ Accordingly, properly-derived DCF valuation is reflective of fundamental value, against which the trading price of a firm is compared in order to establish whether the firm’s stock is a worthwhile investment. Such an approach makes logical sense because if the stock price did reflect fundamental value of the firm, a properly derived DCF valuation would agree with the stock price and one would not dismiss the DCF if it did not.

5. As previously noticed, Dr. Mason will present analysis and graphical representations to summarize and quantify, between March 2020 and March 2021, (a) how many trading days would have been necessary to unwind Archegos’s positions at a given percentage of daily traded volume, (b) how those figures changed over time, and (c) how those figures compared to Archegos’s internal computations relating to the trading days necessary to unwind the portfolio at given percentages of market volume.

6. Using Archegos’s daily combo sheets and publicly available information about average daily trade volume, Dr. Mason has calculated how many trading days it would require to unwind Archegos’s top ten positions in its portfolio at (i) 20% of average daily volume; (ii) 10% of average daily volume; and (iii) 5% of average daily volume. Dr. Mason will present the results in table and graph form, such as Figure 1.

Figure 1 - Share-Weighted Days to Liquidation



² Refresher Reading, 2022 CFA Program, Level II, Reading 25, Equity, Market-Based Valuation: Price and Enterprise Value Multiples.

³ Refresher Reading, 2022 CFA Program, Level II, Reading 25, Equity, Market-Based Valuation: Price and Enterprise Value Multiples.

7. Dr. Mason used the following process to calculate the period required to unwind the portfolio. He started with the Archegos Combo Sheets to determine Archegos's top ten holdings, in terms of market value, on a particular date. He then determined the number of shares underlying those values. Using "ADTV of Select Tickers" from Bloomberg, Dr. Mason was able to determine the average daily volume of trading in the relevant tickers for the 20 days, 10 days, and 5 days preceding the date in question. Dr. Mason then used those average daily trading volume numbers and computed the "share weighted average" for the top ten holdings in the portfolio. He ran that process three times: assuming liquidation at five, ten, and twenty percent daily trading volume. The workbook materials used to perform the foregoing calculations will be produced.

8. Based on this analysis, Dr. Mason will opine that Archegos's top positions increased in concentration over 2020 and, by 2021, could not be promptly unwound at ordinary percentages of trade volume.

9. Dr. Mason will also observe that Archegos's Tail Unwind Reports appear to be incomplete and unreliable, in that they assume many positions could be unwound faster than market data would support. For instance, the January 21, 2021 Tail Unwind Report shows, among other things, Archegos' 5-day and 20-day average daily volume used for the calculation of "Days to Full Unwind with 10% volume."⁴ But if one uses Archegos's reported "Days to Full Unwind" to compute their assumed Average Daily Volume ("ADV"), it becomes immediately apparent that Archegos did not use the 5-day or the 20-day ADV, or the average of the two, but something skewed to their favor that is without basis in the Tail Unwind Report.

10. Based on the figures reflected in the Tail Unwind reports, in the vast majority of cases, Archegos computed its "Days to Full Unwind" on the basis of an assumed ADV that exceeded the *minimum* of the 20-day and 5-day ADVs. And in most cases, Archegos computed its "Days to Full Unwind" on the basis of an assumed ADV that exceeded the *maximum* of the 20-day and 5-day ADVs.

11. The January 21, 2021 Tail Unwind Report, for example, shows that Archegos held 90% of portfolio value in just its top ten positions.⁵ For those top ten long positions, 90% of Archegos's "Days to Full Unwind" estimates were based on ADVs that exceeded the minimum of the 5-day and 20-day ADVs, and 40% of Archegos' estimates used an average daily volume that exceeded the maximum of the 5-day and 20-day ADVs.⁶

⁴ The January 21, 2021 Tail Unwind Report also shows Archegos's calculation of long-term and short-term gains and losses, as well as Total Gains and Losses estimated to be associated with the unwind on each position.

⁵ The January 21, 2021 Tail Unwind Report shows that Archegos held 90% of portfolio value in just its top ten positions, comprising \$8.9 billion in VIAC, \$8.4 billion in BIDU, \$5.8 billion in GSX, \$5.8 billion in TME, \$3.5 billion in VIPS, \$3.4 billion in IQ, \$2.4 billion in FTCH, \$2.4 billion in DISCA, \$0.99 billion in TCBI, and \$0.76 billion in FUBO.

⁶ For *all* of the long positions, 80% of Archegos's "Days to Full Unwind" estimates used an average daily volume that exceeded the minimum of the 5-day and 20-day ADVs, and 52% of Archegos's

12. As described in the Initial Mason Notice, Dr. Mason will opine that the portfolio's composition led to significant margin sensitivity—that is, a risk that small movements in the prices of securities would lead to significant margin calls. Dr. Mason bases this opinion on Archegos's own tally of its holdings and position concentration, which was captured in daily combo sheets, as well as Archegos's High Margin Lots reports. For instance, Archegos's March 23, 2021 High Margin Lot report listed the market value of high-margin swaps on VIAC as \$1,127,088,144, upon which the report estimated a cash impact of closeout of \$1,100,509,620. On that day, therefore, Archegos itself estimated it would need \$1 billion in cash to close out the VIAC swaps alone, ignoring gains or losses on Archegos's other positions. Dr. Mason will observe that this sensitivity, present in the portfolio in 2020, became exacerbated over time as Archegos's position sizes increased and as Archegos accumulated positions at high margin rates.

TRADING DAY EXAMPLES

13. As described in the Initial Mason Notice, Dr. Mason will opine that, between December 2020 and March 2021, Hwang repeatedly and consistently provided trading directives to the Archegos trading team that were inconsistent with a long-term or value-based approach to investing and were consistent with a trading strategy to maximize price impact. Dr. Mason bases his conclusion on the examples identified below, his review of the trader Instant Bloomberg messages identified in the Initial Mason Notice, and his financial and economics training.⁷

14. As set forth below, and as exemplified by numerous Instant Bloomberg threads between Hwang and the Archegos traders between January and March 2021, Archegos traded often, in large amounts, and as substantial portions of market volume.

Example: VIAC Dec 18, 2020⁸

15. Viacom ("VIAC") describes itself as "a leading global media and entertainment company that creates premium content and experiences for audiences worldwide. We offer broadcast and cable television programming, innovative streaming services and digital video products, provide powerful capabilities in production, distribution and advertising solutions, and have one of the industry's most extensive libraries of television and film titles."⁹

estimates used an average daily volume that exceeded the maximum of the 5-day and 20-day ADVs.

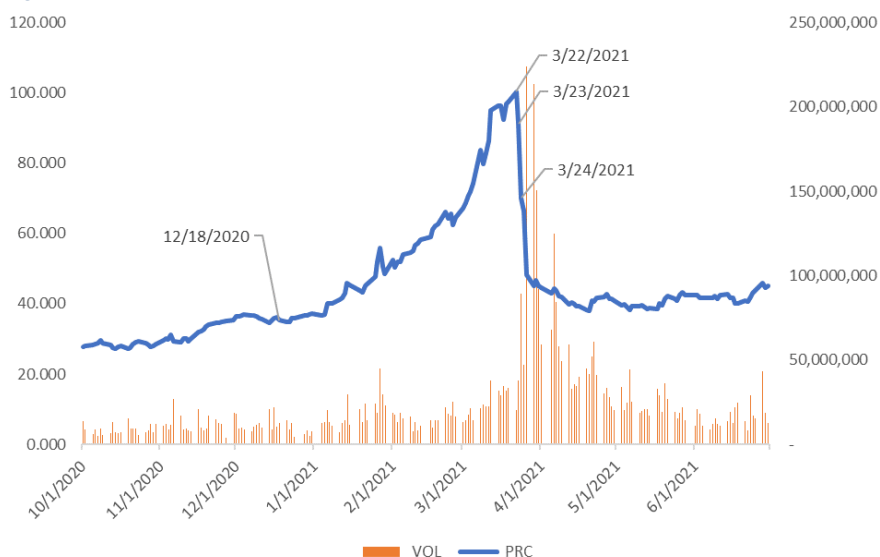
⁷ All chat references are to the Hwang and Traders chat unless otherwise indicated. Gains, losses, volume, and other data taken from the chat records and intraday data should be treated as contemporaneous approximations of actuals.

⁸ SDNY_SWR_0000257475.

⁹ See Viacom 10-k, Dec 31, 2021, at <https://www.sec.gov/Archives/edgar/data/813828/000081382822000005/viac-20211231.htm>

16. Figure 2, below, plots the price and volume changes in VIAC stock between October 1, 2020, and June 30, 2021.

Figure 2 - VIAC Price & Volume



17. For December 17, 2020, the trading day prior to December 18, 2020, Archegos Combo Sheets reported that Archegos's positions corresponded to 182,743,852 shares or share equivalents of VIAC, so that at the December 17, 2020 price of \$37.26, Archegos indirectly held or otherwise influenced or controlled market value of \$6,809,035,926 of VIAC, amounting to about 18.9% of Archegos' long holdings.

18. VIAC's market capitalization the prior day, December 17, 2020, was approximately \$22.39 billion, so that Archegos's holdings corresponded to about 30.41% of the market capitalization of VIAC on that date. Free floating shares on December 17, 2020, were reported to be 95.55% of the market capitalization, so that Archegos would have held or otherwise influenced or controlled about 31.82% of the free float of VIAC on December 17, 2020.

19. At roughly 3:40pm on December 17, Tomita texted Hwang:

12/17/2020 20:39:30 UTC WILLIAM TOMITA(WT0MITA1@Bloomberg.net) posted: Hi Bill, VIAC & GSX shorting color in your inbox ...there was some notable covering in VIAC yday.

12/17/2020 20:39:54 UTC BILL HWANG (BHWANG@Bloomberg.net) posted: **That is good to see!**

12/17/2020 20:40:03 UTC WILLIAM TOMITA(WT0MITA1@Bloomberg.net) posted: :-)

20. Based on his professional experience, Dr. Mason will explain that “notable covering” in the context of short trading refers to the phenomenon where traders with bets that the stock will go down saw it go up instead and bought the stock to cover their short positions. (If they own the stock, the increase in price offsets their loss arising from its failure to decline.) Dr. Mason will further opine that this phenomenon is well documented in the securities industry and that, under certain market conditions, upward price pressure can induce a “short squeeze,” that is, a price movement that forces short sellers to buy to cover and thus causes additional upward price pressure on the stock as buying demand increases.

21. Figure 3, below, plots Viacom’s stock price and volume changes throughout the day on December 18, 2020. In addition, Figure 3 reflects Archegos’s summary trade order activity over time on December 18, 2020. The trade data indicates that Archegos’s buying at times represented 40% - 50% of the share volume during those periods and coincided with upward movement in VIAC’s stock price.

Figure 3



22. At 9:33am, three minutes after the market opened on December 18, Austin Scholl posted in the Trader chat “35.40 to buy \$50mm VIAC.” According to the Trader and Operations chat, this was to be placed “VIAC 10 MS + 40 NOM[.]” Based on contemporaneous market prices, \$50 million of VIAC at a price of 35.40 equates to just over 1.4 million shares. Based on trade volume, only 684,575 shares had traded at that point.

23. By 9:47am, Archegos had purchased \$18 million of VIAC before Hwang wrote, “pull

back and let it settle a bit since we bought a nice chunk.”¹⁰ The \$18 million represented 27% of trading volume for the day, so far, and 43% of volume since the last update at 9:33am. Hwang’s morning trading, therefore accounted for 27% of market volume in the first 27 minutes of trading on December 18, 2020.

24. At 9:48am, Scholl posted on Trader chat “35.10 VIAC” and at 9:59 am ET Scholl moved that to “35.10 VIAC.” At 10:07 am ET, Scholl moved the limit to “35.35 VIAC.” At 10:11 am ET, Scholl posted on Trader chat “Up to \$40mm VIAC get in quickly” and replied to Tomita’s “Can you redirect VIAC balance to GS” with “Yes will do GS swp on balance.” This timing is consistent with a short squeeze attempt because it took place precisely at the time of the morning that VIAC price was moving sharply upward. At 10:15 am ET Scholl posts on Trader chat “35.65 for VIAC now but have discretion on limit just let knoww hat we are doing.”

25. At 10:23am, Scholl posts on Trader chat “35.70 VIAC to finish that \$40mm.” \$40 million of VIAC at 35.50 corresponded to 1,126,761 shares, which, based upon total cumulative market volume, up to that time of the day, Archegos traded roughly 37% of market volume associated with the morning run-up in price, and 53% of volume since the last update at 9:47am.

26. At 10:47am, Scholl posts on Trader chat “VIAC \$35.50 another \$30mm[.]” The total \$70 million of VIAC at 35.50 amounts to 1,971,831 shares, which is 54% of volume to that point of the day. At 10:49 am ET, Trader and Operations chat confirms the additional amount would be placed at GS. At 11:05 am ET, Scholl adjusted the limit to 35.30 and then 35.40. Adjusting the limits enabled Archegos to purchase more shares as the market price declined.

27. By 11:33am, Taniguchi reports that Archegos’s VIAC purchases for the day had risen to \$47 million. That amount represented approximately 31% of total cumulative market volume for the day, so far, and approximately 16% of the volume since the last update at 10:23am.

28. At 11:34am, Taniguchi reported that Hwang had already decreased the VIAC price limit from 35.50 at 10:54 am to 35.40 at 11:34 am ET.

29. At 11:35am, Hwang wrote, “Let’s go to 35.3” limit on VIAC. At 11:44 am ET, Hwang wrote, “35.3 limit makes sense for VIAC.”

30. By 12:04pm, Hwang had purchased \$49 million of VIAC, so far that day. At a price of 35.50, this amounted to 30% of the total cumulative market volume, up to that time of the day, and 22% of the volume since the last update at 11:33am.

31. By 1:16pm, Hwang’s purchases for the day totaled \$50 million, although the price was below Hwang’s 35.30 limit then in place. The \$50 million is 28% of the trading volume for the

¹⁰ At 10:54am on December 18, 2020, Hwang asks “What are our limits for ... VIAC now please?”, to which Scholl replies “VIAC 35.50”. Without prior change in the VIAC limit that day, the prior \$18 million would likely have been purchased at open to try to push the market up and induce shorts to cover further.

day, so far, and 6% of the volume since the last update at 12:04am.

32. At 1:43pm, Hwang confirms his target for VIAC purchases of \$70 million for the day.

33. At 2:57pm, Hwang increases the daily purchase target to \$80 million “VIAC in case price continues to be weak.” At a price of 35.50, the \$80 million amounts to 2,253,521 shares, which amounts to 37% of market volume to 2:57 pm ET. At 2:58 pm Trader and Operations chat confirms that can be purchased on GS, so that “All in 52 GS+ 18 NOM+ 10 MS.”

34. By 3:24pm, Archegos had purchased \$57 million of VIAC for the day and was posting a limit price of 35.20. Note that at a price of 35.50, the \$57 million of VIAC amounts to 1,605,634 shares, or 25% of total cumulative market volume, up to that time of the day, and 15% of the volume since the last update at 1:16pm.

35. At 3:27pm, Hwang asks Scholl “Should we to 35.15 or 35.10 for VIAC?”, to which Scholl replies “Would like to use 35.10 then adjust in the last 15 mins if needed.” This is notable because the last fifteen minutes of trading affect the recorded closing price that is used to mark portfolios to market, which is computed using orders entered during the last ten minutes of the trading day.¹¹

36. At 3:41pm, Scholl posts on Trader chat “Can do another \$10mm or so if getting good liquidity at these prices in DISCA and VIAC if we see fit.” A total target of \$90 million of VIAC at 35.50 amounted to 38% of total market volume to 3:41 pm.¹²

37. Trade volume picked up considerably the last fifteen minutes of trading on December 18, 2020, which boosted the price from a low of 35.09 in the last hour of trading to close at a final tick for the day of 35.26. Even including the (typically more active) closing auction activity to the end of the trading day, Archegos traded 23% of total market volume in VIAC for the day.¹³

38. While Archegos traded VIAC the next trading day, December 22, 2020, it opened with a limit of 34.20, roughly a dollar below the December 18, 2020 final tick.¹⁴

39. Archegos’s December 18, 2020 VIAC trading, as reflected in the Bloomberg messages, is reported in Table 1.

¹¹ See, NASDAQ, “The Opening and Closing Crosses,” 2023, at https://nasdaqtrader.com/content/productservices/trading/crosses/openclose_faqs.pdf

¹² \$90 million target / \$35.50 = 2,535,211 target shares. The total intraday volume through 3:41pm amounts to 6,645,718 shares.

¹³ The total intraday volume amounts to 10,960,250.

¹⁴ See transcript of chats between Hwang and Traders at 10:37 am ET.

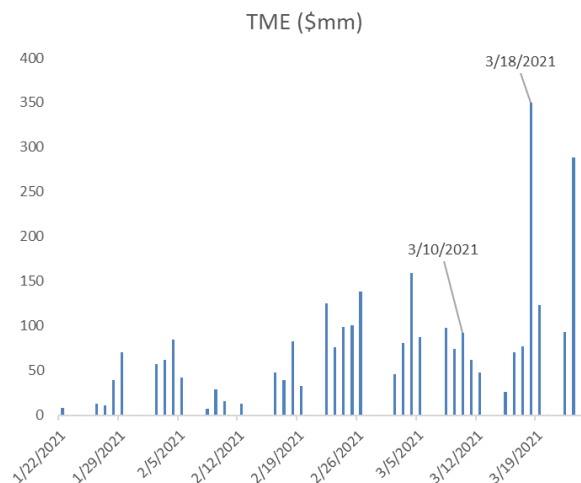
Table 1

Time	Archegos Positions	Archegos Purchases	Price	\$ Price Change Since Last Update	% Price Change Since Last Update	Archegos Shares Purchased	Archegos Shares Positions	Cumulative Volume to Minute	Volume Since Last Update	% of Archegos Position to Cumulative Volume to Minute	% of Archegos Purchases to Volume Since Last Update
9:30 AM	\$0	\$0	35.48								
09:32 - 09:33	\$0	\$0	35.14	-\$0.34	-1.0%	-	-	684,575	684,575	0.0%	0.0%
09:46 - 09:47	\$18,000,000	\$18,000,000	35.40	\$0.26	0.7%	508,475	508,475	1,862,932	1,178,357	27.3%	43.2%
10:22 - 10:23	\$40,000,000	\$22,000,000	35.50	\$0.10	0.3%	618,286	1,126,761	3,032,007	1,169,075	37.2%	52.9%
11:32 - 11:33	\$47,000,000	\$7,000,000	35.50	\$0.00	0.0%	197,183	1,323,944	4,302,579	1,270,572	30.8%	15.5%
12:03 - 12:04	\$49,000,000	\$2,000,000	35.50	\$0.00	0.0%	56,338	1,380,282	4,560,305	257,726	30.3%	21.9%
13:15 - 13:16	\$50,000,000	\$1,000,000	35.50	\$0.00	0.0%	28,169	1,408,451	5,051,645	491,340	27.9%	5.7%
15:23 - 15:24	\$57,000,000	\$7,000,000	35.50	\$0.00	0.0%	197,183	1,605,634	6,360,284	1,308,639	25.2%	15.1%
15:40 - 15:41			35.13	-\$0.38	-1.1%			6,645,718	285,434		
15:59 - 16:00			35.26	\$0.13	0.4%			10,960,250	4,314,532		

Example: TME March 10, 2021¹⁵

40. Tencent Music and Entertainment (“TME”) bills itself as “the leading innovative online music entertainment platform in China.”¹⁶

41. On January 19, 2021, TME stock jumped to a new high compared to the prior year’s trading. As reflected in the figure below, below, in the weeks between January 19, 2021 and March 18, 2021, TME fluctuated around a price of about \$26.50. On several days during the time between January 19, 2021 and March 11, 2021, the stock closed at lows of around \$25, while it tested highs above \$27 on several other days. Around this time, it was broadly reported that “Chinese regulators have signalled [sic] a tougher approach towards tech firms,” creating risk for investors that the share price would fall on a regulatory crackdown.¹⁷



¹⁵ SDNY_SWR_0000316566.

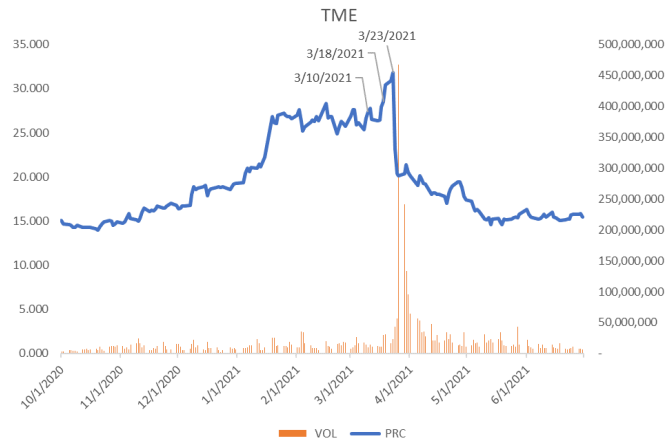
¹⁶ TME press release of Jan 15, 2021, at <https://www.tencentmusic.com/en-us/news-detail.html#3>.

¹⁷ See, e.g., “China’s tech giants fall under regulator’s pressure,” March 15, 2021, at <https://www.bbc.com/news/business-56410769>

42. Based on Dr. Mason's experience with the financial markets, it would be typical to think that short investors had gathered positions that would profit from the risk of decline. Since January 19, 2021, the floor on TME seemed to be around \$25 and the peak somewhere in the \$27's. On February 16, 2021, TME closed at \$28.30, and on March 2 and 3, 2021, TME closed at \$27.60 and \$27.65, respectively. On all other days since February 16, 2021, TME had closed in the \$25-\$26 range. If an investor could drive TME higher than its prior closing prices, potentially above \$28.00, that might cause short investors to cover their losses from rising prices in a classic short squeeze, those short investors' purchases would increase the quantity of the stock demanded and, therefore, the price of the stock, to further benefit long holders like Archegos.

43. Figure 4, below, plots the price and volume changes in TME stock between October 1, 2020, and June 30, 2020.

Figure 4 - TME Price & Volume

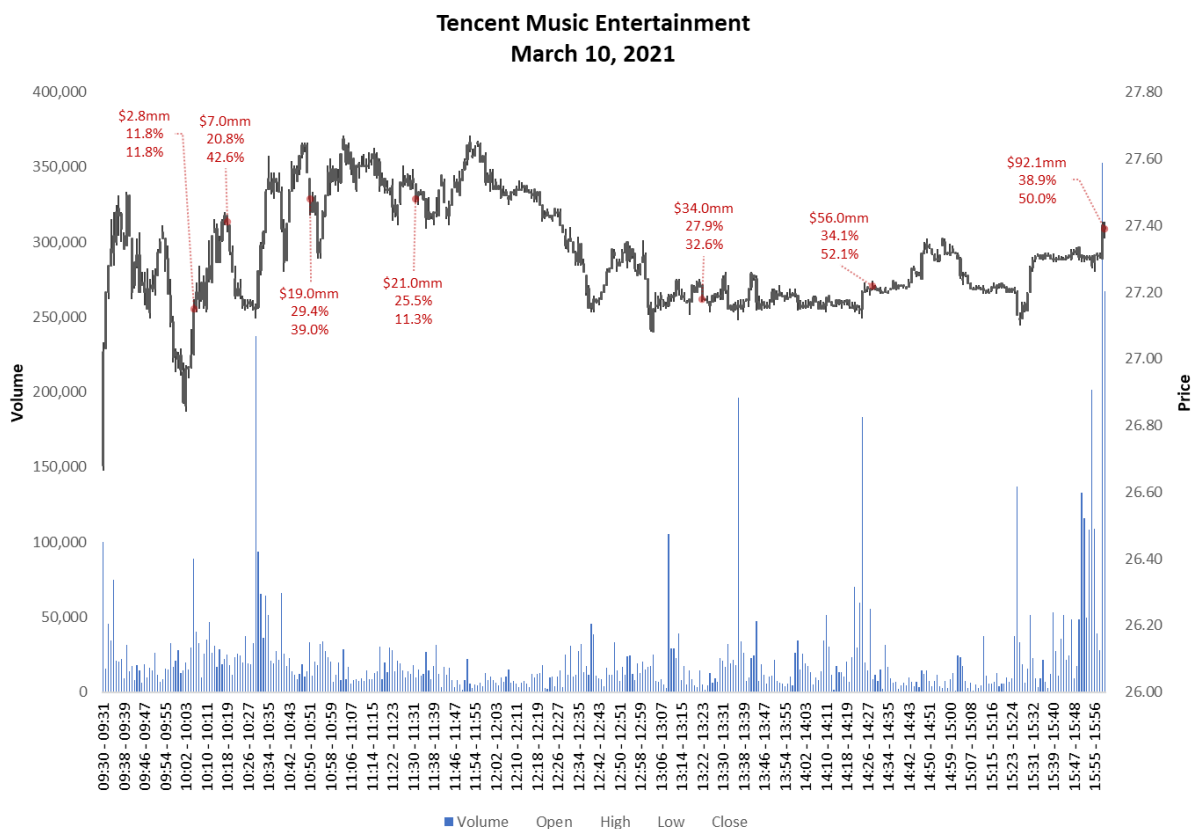


44. Archegos Combo Sheets reported that on March 9, 2021, Archegos's positions corresponded to 291,737,926 shares or share equivalents of TME, so that, at the March 9, 2021 price of \$26.69, Archegos indirectly held or otherwise influenced or controlled market value of \$7,786,485,245 of TME, amounting to about 9.03% of Archegos's long holdings.

45. Because TME traded as an ADR in the United States, free float was not publicly reported. On March 9, 2021, TME's market capitalization was approximately \$49.16 billion, so that Archegos's holdings corresponded to about 15.84% of the market capitalization of TME on that date. Since free floating shares are less than the total used in the calculation of market capitalization, Archegos would have held or otherwise influenced *more than* 15.84% of the free float of TME on March 9, 2021.

46. The figure below plots TME's stock price and volume changes throughout March 10, 2021. In addition, the figure plots Archegos's buying activity over time on March 10, 2021. The trade data indicates that Archegos's buying at times represented 40% - 50% of the share volume during those periods and coincided with upward movement in TME's stock price.

Figure 5



Data callouts are Archegos Purchases / Percent of Volume to Time of Day / Percent of Volume Since Last Update

47. On March 10, 2021, at 9:42am, at the start of the trading day, Peter Desanto noted to Hwang and the other traders: "TME: board is light, CS is #1, but just with 18k shs, then JPM and Citi. Volume is 80% normal."

48. At 9:55am, Hwang wrote, "PETER BUY \$50 MIL. TME 1/3 OF VOLUME [WITH] 27.6 LIMIT."

49. Then, at 10:04am, Hwang wrote, "PETER ON TME LET'S USE 27.15 AS THE FIRM LIMIT THEN UP TO 27.5 AS 1/3 OF VOLUME LIMIT," to which Desanto replies "got it."

50. At 10:06am, Hwang inquired, "PETER HOW MUCH TME?", to which Desanto replied "\$2.8mm." Up until that point in the day, Archegos had purchased 12% of total volume in TME, and TME price had increased \$0.47 per share since the open.

51. At 10:19am, Hwang again inquired, “PETER HOW MUCH TME?,” to which Desanto replied “\$7mm”, which amounted to 21% of the volume for the day and 43% of the volume since the update at 10:06am. Since Hwang’s previous inquiry, the price of TME had risen \$0.26 per share.

52. At 10:51am, Hwang again inquired, “PETER HOW MUCH/,” to which Desanto replied “TME: \$19mm and VIPS: \$20mm, which amounted to 29% of TME volume since the open and 39% of TME volume since the update at 10:19am. Since Hwang’s previous inquiry, the price of TME had risen by \$0.07 per share.

53. At 10:52am, Hwang instructed, “PETER: LET’S UPSIZE BOTH TO \$50 MIL,” to which Desanto replied “got it.”

54. At 11:32am, Hwang again inquired, “PETER HOW MUCH?,” to which Desanto replied “TME: \$21.1mm . . . ,” which amounted to 26% of volume since the open and 11% of volume since the update at 10:51am.

55. At 1:23pm, Desanto reported, “TME: \$34mm . . . ,” which amounted to 28% of volume since the open and 33% of volume since the previous update. Since Hwang’s previous inquiry, the price of TME had fallen by \$0.30 per share.

56. At 2:29pm, Hwang inquired, “PETER HOW MUCH PLEASE?,” to which Desanto replied “TME: \$56mm . . . ,” which amounted to 34% of volume since the open and over 52% of volume since the previous update. Since the previous report, the price of TME had risen by \$0.04 per share.

57. At 2:51pm, Desanto reported, “TME: \$56mm . . . ”

58. At 3:01pm, Hwang instructed, “PETER PLEASE RECOMMEND NEW LIMITS TO FINISH THE ORDERS.” Desanto replied, “TME: 27.40 . . . but its hard to gauge this early.” At 3:04pm, Desanto wrote, “TME: leave \$18mm”, to which Hwang replied at 3:05pm, “YOU CAN USE THOSE LIMITS ANYTIME YOU WANT. AND ADD \$10 MIL. FOR EACH NAME IF YOU WANT.”

59. At 3:56pm, four minutes before close, Desanto asked, “TME okay to add another \$10mm?,” to which Hwang replied, “YES”. At 3:57pm, Desanto replied, “ty.”

60. In the final tally, messaged out at 4:06pm, Archegos bought \$92.1 million of TME, which was 39% of total market volume for the day and 50% of market volume in roughly the last hour of trading, since the report at 2:29pm. In that approximately final hour and a half, the price of TME rose by \$0.17 per share.

61. In total for the day, the price of TME rose by 2.7%, or \$0.71 per share (from open to close), so that Archegos’s shares would have experienced a gain of approximately $291,737,926 \times \$0.71 \approx \207 million in the day’s trading.

62. On March 11, 2021, TME closed at another high of \$27.78. TME then slipped back into the \$26's until March 17, when TME closed at \$27.90. On March 18, 2021, TME closed above \$28 for the first time since February 16, 2021, after which it continued rising until March 23, 2021.

Example: FUTU, March 1, 2021

63. FUTU offers online brokerage services in southeast Asia.¹⁸

64. For February 26, 2021, the trading day prior to March 1, 2021, February 26, 2021, Archegos Combo Sheets reported that Archegos was short 25,950,789 FUTU shares or share equivalents, worth \$3,965,021,051 on that date. FUTU was Archegos's fourth largest short on that date. As a result, Archegos stood to gain by boosting the price of FUTU at the beginning of the trading day on March 1, 2021, making further short purchases relatively cheaply, and then selling a large volume of FUTU at the close of the trading day to help drive the price back down.

¹⁸ See, e.g., FUTU 2020 10-k at <https://ir.futuholdings.com/static-files/987fd24a-8db0-4126-b267-9a03f397f968>.

65. Figure 5, below, plots FUTU's stock price and volume changes throughout March 1, 2021. In addition, Figure 5 plots Archegos's buying and short selling activity over time on March 1, 2021. The trade data indicates that Archegos's activity at times represented 20% - 30% of the share volume during those periods and coincided with movement in FUTU's stock price.

Figure 6



Data callouts are Archegos Purchases / Percent of Volume to Time of Day / Percent of Volume Since Last Update

66. On March 1, 2021, FUTU opened at \$165.21 and continued to gain until 9:45am, when it hit its high of the day at \$171.69. It held at that level until 10:41am, after which it began to fall precipitously.

67. On March 1, 2021, Archegos bought FUTU throughout the day until roughly the last hour and a half, during which they sold heavily. Archegos's long purchases were offset by short sales at the end of the day, so that their net position was unchanged that day. The price of FUTU fell roughly \$1.55 per share in that time period, however, yielding gains to Archegos.

68. According to an order update that Daiki Taniguchi sent at 10:41am on March 1, 2021, before that point Archegos had bought \$139.1 million worth of FUTU long, and \$32 million worth of FUTU short. Archegos's \$139.1 million purchase amounted to about 24% of trading volume for the day, as of that time. Including the short volume, Archegos made up about 29.1% of the

total volume as of that time. Almost immediately after this report, FUTU's price fell.

69. By 11:52am, Archegos's purchases in FUTU had increased only slightly, to a total of \$143 million, amounting to 20% of the trading volume for the day, up to that point, and 3% of the purchase volume, but including shorts, that amounted to 27.4% of total volume and 20.5% of volume since the 10:41am update.

70. At 1:19pm, Hwang wrote, "AUSTIN ON FUTU, LET'S PLAN TO BE NET 0 OR NET SELL TODAY."

71. At 1:51pm, the order update within the chat reported that Archegos had purchased \$151 million and sold \$59.1 million of FUTU. The \$151 million purchase amounted to 18% of the trading volume for the day at that point, and 8% of the volume since the 11:52am update. Including shorts, Archegos was responsible for 25.9% of daily volume and 11.6% of volume since the previous update.

72. At 2:11pm, the positions had changed slightly, with \$152 million long and \$67.4 million short, which amounted to a growth in the short position of just \$8 million, despite Hwang's instructions from 1:19pm to finish the day even or short. That meant there was a deficit of \$83.6 million (\$152 million long minus \$67.4 million short) to be shorted in the remainder of the day's trading to make up the difference. Including shorts, Archegos was responsible for 25.8% of daily volume and 23.3% of volume since the previous update.

73. The final tally at 4:03pm reported buys of \$152 million and sells of \$150.7 million. That means Archegos sold \$83.3 million of FUTU over the final hour and forty-nine minutes of the trading day while buying virtually nothing. Market volume in FUTU during that period was around 1,065,102 shares.¹⁹ Including shorts, Archegos was responsible for 29.8% of daily volume and 50.3% of volume since the previous update.

74. FUTU price in that period fell from 167.2325 to 166.89 in the next minute, and to 165.68 by the market close for a decline of \$1.55 per share to the close. For the day, FUTU was up \$0.47 since the start of trading for a loss to Archegos of about \$12 million, but that was a better result than if the stock had maintained its intraday highs from roughly 9:45, 1:45, and 3:00, and gained nearly \$5.00 per share from the open, which would have resulted in losses of around \$120 million, instead.

Example: IQ March 16, 2021²⁰

75. iQIYI is an online entertainment provider in China.²¹

¹⁹ There were two minutes for which volume was not reported, so this figure is approximate.

²⁰ SDNY_SWR_0000316566.

²¹ IQ Annual Report for 2020, at <https://ir.iqiyi.com/static-files/b354fb69-a41d-460a-89fd-8112f5300012>

76. Figure 8, below, plots the price and volume changes in IQ stock between October 1, 2020, and June 30, 2021.

Figure 7



77. For March 15, 2021, the trading day prior to March 16, 2021, Archegos Combo Sheets reported that Archegos's position corresponded to 216,932,651 shares or share equivalents of IQ, so that at the March 15, 2021 price of \$25.50 Archegos indirectly held or otherwise influenced or controlled market value of \$5,531,782,601 of IQ, amounting to approximately 5.63% of Archegos's long holdings.

78. IQ's market capitalization on March 16, 2021 was approximately \$19.84 billion, so Archegos's holdings corresponded to about 28% of the market capitalization of IQ on that date. Since free floating shares are less than the total used in the calculation of market capitalizations, Archegos's position would have corresponded to *more than* 28% of the free float of IQ on March 16, 2021.

79. At 9:20am, before the start of trading on March 16, 2021, Desanto noted to Hwang, "IQ: on 12/17 there was the follow-on offering of 40mm shares that priced at 17.50. The lock-up expiry for these shares is tomorrow. Stock is +48bps (last 25.26) in the premkt."

80. "The purpose of an IPO lock-up is to prevent the flooding of the market with too much of a company's stock supply too quickly. Typically, only 20% of a company's outstanding shares are initially offered to the investing public. A single large shareholder trying to unload all of their holdings in the first week of trading could send the stock down to the detriment of all shareholders."²² According to Ofek (2008), "there is a 1% - 3% drop in the stock price, and a 40%

²² See, e.g., <https://www.investopedia.com/terms/i/ipolockup.asp>

increase in volume, when the lock-up ends.”²³ If the stock price does not decline as expected, or if the stock increases – rather than decreases – in price, short sellers anticipating the decline may purchase shares to cover their losses and potentially drive up the price. Since Archegos held a long position and restricted a substantial share of the capitalization (and float), they were in a position to try to precipitate a “short squeeze” that benefited their portfolio value.

81. Based on Ofek (2008), Dr. Mason will opine that dates of lockup expirations are typically days with heavy trading volume, such that a volume target of 1/3 may amount to substantial trading activity.

82. Figure 9, below, plots IQ’s stock price and volume changes throughout March 16, 2021. In addition, Figure 9 plots Archegos’s buying activity over time on March 16, 2021. The trade data indicates that Archegos’s buying at times represented more than 30% and 40% of the share volume during those periods and coincided with upward movement in IQ’s stock price.

Figure 8



Data callouts are Archegos Purchases / Percent of Volume to Time of Day / Percent of Volume Since Last Update

83. The contemporaneous Bloomberg messages reflect numerous instructions from Hwang directing the trading that day. For example:

²³ Ofek, Eli, The IPO Lock-Up Period: Implications for Market Efficiency and Downward Sloping Demand Curves (January 2000). NYU Working Paper No. FIN-99-054, Available at SSRN: <https://ssrn.com/abstract=1298279>

a. At 9:51am, Hwang instructed Desanto “PETER IQ BUY \$30 MIL. WITH 25.25 1/3 % VOLUME LIMIT.”

b. At 10:27am, Hwang inquired, “PETER HOW MUCH IQ?,” to which Desanto replied, “IQ: \$500k worth.” That amounted to 5% of the daily volume up to that point, and the price had risen \$0.07 since open.

c. At 12:00pm, Hwang again inquired, “PETER HOW MUCH IQ... ,” to which Desanto replied “IQ \$2.7mm.” That amounted to 10% of the total daily trading volume to that point, and 13% of the volume since the 10:27am update. The price had fallen by \$0.06 since the 10:27am update.

d. At 12:30pm Hwang again inquired, “PETER HOW MUCH ... IQ?,” to which Tomita replied “IQ: \$3.8mm” That amounted to 12% of the total daily trading volume up to that point, and 28% of volume since the 12:00pm update. The price had fallen by \$0.07 since that update.

e. At 1:20pm, Hwang inquired, “Peter ... how much on your names?,” to which Desanto replied “IQ: \$5.4mm.” That amounted to 15% of the total daily trading volume up to that point, and 27% of the volume since the 12:30pm update. The price had risen by \$0.06 since that update.

f. At 1:23pm, Hwang instructed, “PETER IQ TO 25.3 ... PLEASE.,” to which Desanto replied, “got it.”

g. At 1:29pm, Hwang instructs further, “PETER ON IQ LET'S USE 25 .3 AS FIRM LIMIT NOW.”, to which Desanto replies “got it”.

h. At 1:33pm, Hwang inquires, “PETER NOW MUCH OFFER ON IQ BELOW 25.3? DO WE NEED TO GO UP?” Desanto replies “there is some. Trying to contact the trader now to buy that now” Hwang replies, “PETER GOT YOU ON IQ”.

i. At 1:40pm, Desanto reports, “IQ we bought ~\$2.2mm more so now up to \$8.3mm”, to which Hwang replies “PETER THANKS!” This is 19.6% of the volume so far, that day. Since the last update, Archegos has accounted for 59.1% of volume and price has risen by another \$0.05.

j. At 2:26pm, Desanto reports, “not a lot of volume but heavy, can we go down to 25.20?” and at 2:27pm writes “we bought \$13mm of IQ”. Hwang replies “PETER. THANKS.” This is 25% of the total trading volume so far, that day, and 48% of the volume since the last update at 1:40pm The price has fallen by \$0.04 since.

k. At 2:28pm, Desanto asks, “ok to step down to 25.20?... for IQ”, to which Hwang replies “YES”.

l. At 2:50pm, Hwang instructs, “PETER IQ TO 25.3 ...”, to which Desanto replies

“got it”.

m. At 3:15pm, Hwang inquires, “PETER HOW MUCH ON CHINA3?”, to which Desanto replies “IQ: 14.8mm, TME: \$10.2mm, VIPS: \$43.3mm.” This is 23% of the total trading volume so far, that day, and 15% of the volume since the last update at 2:50pm. The price had risen by \$0.24 since.

n. Two minutes later, Hwang instructs, “PETER TME 26.45 IQ TO 25.5.” Desanto replies, again, “got it”.

o. At 3:18pm, with 42 minutes left in the trading day, Hwang raises the daily purchase target from \$30 million to \$50 million, writing, “PETER IQ TO \$50 MIL[,]” to which Desanto replies “got it”.

84. In the final tally, Archegos purchased \$26.8 million of IQ, which amounted to 27% of the daily trading volume. They bought 36% of market volume in the last 42 minutes of trading, during which time IQ price rose another \$0.05.

85. For the day as a whole, Archegos purchased 27% of the volume and the price rose \$0.25 (from open to close) instead of declining, as academic literature would predict for the day a firm’s offering lockup expires. Using the 216,932,651 shares held on March 15, 2021, Archegos made approximately $216,932,651 \times \$0.25 = \54.2 million on March 16, 2021, instead of losing money on the lockup expiration.

Example: VIAC March 22-24, 2021²⁴

86. Viacom (“VIAC”) describes itself as “a leading global media and entertainment company that creates premium content and experiences for audiences worldwide. We offer broadcast and cable television programming, innovative streaming services and digital video products, provide powerful capabilities in production, distribution and advertising solutions, and have one of the industry’s most extensive libraries of television and film titles.”²⁵

87. By March 2021, Archegos had amassed large exposure to VIAC. As of March 19, 2021, Archegos Combo Sheets reported that Archegos’s holdings corresponded to 283,936,989 shares or share equivalents of VIAC, so that at the March 19, 2021 price of \$97.35 Archegos held or otherwise influenced or controlled market value of \$27,641,265,879 of VIAC, amounting to approximately 26% of Archegos’ long holdings.

²⁴ SDNY_SWR_0000316566.

²⁵ See Viacom 10-k, Dec 31, 2021, at <https://www.sec.gov/Archives/edgar/data/813828/000081382822000005/viac-20211231.htm>

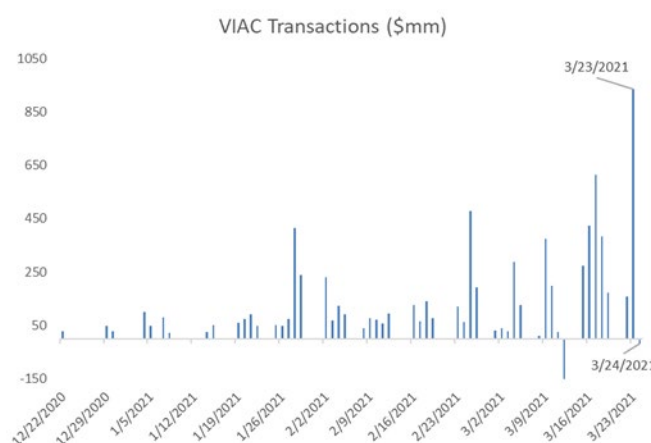
88. VIAC's market capitalization the prior day, March 19, 2021, was approximately \$60.31 billion, so that Archegos held or otherwise influenced or controlled about 45.83% of the market capitalization of TME on that date. Free floating shares on March 19, 2021, were reported to be 95.58% of the market capitalization, so that Archegos would have held or otherwise influenced or controlled about 47.95% of the free float of VIAC on March 19, 2021.

89. Archegos traders acknowledged rumors that VIAC was considering raising additional capital as early as March 9, 2021, according to the exchange on the Hwang and Traders chat at 10:54am, Tomita noted "Doug Kass – CNBC... VIAC -5.6%; Doug Kass said hearing company considering large share offering (unconfirmed)(going around)... Think that is a talkign head on cnbc," to which Hwang replied "WILL THANK YOU!"

90. Based on professional experience and academic literature, Dr. Mason will observe that when a firm offers additional shares, two dynamics generally arise that depress the stock price: first, by issuing more shares, the firm dilutes the value of existing shares, and, second, sales arising from such dilution may contribute additional downward price pressure. Accordingly, a seasoned equity offering tends to put downward pressure on stock prices.

91. Archegos purchased more and more VIAC leading up to the eventual announcement, which occurred after the close of trading on March 22, 2021. The next day, March 23, Archegos purchased record amounts of VIAC in the face of the potential market decline that day. Figure 8, below, illustrates Archegos's VIAC transaction amounts over the period December 22, 2020 through March 23, 2021. It illustrates that Archegos purchased more VIAC on March 23 than on any other day in the prior three months.

Figure 9



92. VIAC price lost \$9.09 per share on March 23, 2021. Archegos' shares (as of the prior day) would, therefore, have lost $285,534,626 \times -\$9.09 \approx -\2.6 billion in value on that day, alone.

93. Based on the High Margin Lots report for March 23, 2021, Archegos estimated that it

would need cash of \$1,100,509,620 – an amount equivalent to that of over 12 million VIAC shares the last recorded price of \$91.25 at the close of trading on March 23, 2021 (44% of the total Market volume on March 23; more than 150% of the total market volume on March 22) – to generate enough cash to close out the VIAC swaps positions.

94. By March 2023, Archegos held roughly 50% of the free float in VIAC making its position extremely difficult to unwind without losses. Indeed, as calculated by Dr. Mason, it would have taken 63 trading days to unwind the VIAC position at 20% of average daily volume, even assuming away the fact that volume would have been lighter without Archegos's trading.

95. Based on this evidence, and his understanding of the market dynamics attending to seasoned equity offerings and margin calls, Dr. Mason will opine that the Archegos's trading activity on March 23, 2021 is consistent with a strategy to inflate stock prices to avoid a margin call and inconsistent with a value approach to investing.

ADDITIONAL EXAMPLES

96. Based on a review of the Bloomberg IB Trader chats, Dr. Mason will observe that Archegos traders occasionally refer to "flushing out" sellers, sometimes in response to Archegos' own trading tactics.

97. For instance, On December 31, 2020, at 10:28am, Hwang asks, "Austin, how is Discovery?", to which Austin Scholl replies "Its barely [trading].... Only bought \$250k so far[.]" After raising the price offered for Discovery from 29.90 to 30.10 at 10:30, School replies two minutes later, "We are in there... Took everytihng \$30.00 or better only for total \$1mm in". Scholl notes, however, "Continue to try but its very thin right now!," to which Hwang replies "The sellers tend to show up when we buy some stocks :-)".

98. In other instances (from the Trader Chats), On August 14, 2020, Scholl writes at 9:52am "... starting to feel pretty stable now though *without us really in the mkt anymore*" [Emphasis added], to which Tomita replies at 9:54am "I think that sellers need to get flushed out... And they will recover later in the day".

99. On February 18, 2021, Tomita writes at 10:54am "stay put for now with volume fading." Scholl replies, "Yeah and since not lifting with the market, we thin its better to just **let it flush out without us** a bit since heavy... Is what we said[.]" Two minutes later, Scholl provides further context, writing, "*The fact its not lifting makes me think we'd use up too much of our target too early*", (emphasis added), to which Tomita replies, "Yep agreed".

100. Further still, on February 23, 2021, before the start of trading, Hwang writes, "FOR MOST STOCKS, WE ARE GOING TO WAIT AND FLUSH OUT SELLERS AND GET INVOLVED LATER IN THE MARKET UNLESS SOME NAMES GO DOWN REALLY A LOT.... VIAC AND DISCOVERY ARE TWO NAMES THAT WE GET INVOLVED EARLY."

101. The Combo Sheet table that follows shows that on February 22, 2021 (the day before February 23 trading), the stocks at issue made up almost 90% of the long portfolio value, so that price increases on those would substantially benefit Archegos. At this time, Archegos's position corresponded to more than 40% of the float in VIAC, almost 35% of the float in GSX, over 30% of the float in TCBI, roughly 20% of the float in FTCH, IQ, and VIPS, and about 15% of BIDU and 14% of TME.

102. Table 4, below, reflects the intraday updates on trading that the traders supplied to Hwang. The trading activity shows that the traders did as planned and purchased DISC and VIAC before 10:00am. Archegos then concentrated its activity between 2:41pm and the market close at 4:00pm, when Archegos purchased substantial long positions (as well as short positions in FUTU).

Table 2

Incremental Buys/Sells Between Reporting Periods (\$mm)												
	BIDU	DiscA	DiscK	FTCH	GSX	IQ	B FUTU	S FUTU	TCBI	TME	VIAC	VIPS
10:06 AM	10	37.7	29.1	4.3	0.7	0	92.8	0		0.2	43.8	1.5
10:35 AM	26	12.3	21.9	15.7	0.6	3.6	35.4	0		19.5	22.2	7.6
11:23 AM	54.9	9.6	10.3	0.1	8.4	0.2	20.7	-4.3		0.9	3.4	6.2
12:12 PM	73.4	4.6	4.3	11.9	10.7	9.2	3.5	-20.6		7.8	6	12.7
12:53 PM	23.6	4.7	4.8	6.9	0	2.7	49.4	-8.3	1.3	2.9	3.7	2.8
1:34 PM	6.1	8.3	4.5	5.1	0.8	2.3	0	-12.4	0.5	1.2	8.2	2.2
2:41 PM	23.6	21.1	13.4	2.8	7.8	10.9	4.4	-8.2	1.4	11.8	5.6	3.5
4:06 PM	129.8	102.5	65	22.3	27.7	31	2.4	-69.4	0	32.3	26.8	27.1

103. Such a strategy benefited Archegos' portfolio value that day, overall. The contemporaneous chats below show that, with regard to DISC and VIAC, Archegos offered to purchase at high prices early in the day before revising their limits downward considerably. At 9:11am, Daiki suggests "VIAC 66.50 limit DISCA 55.60 [and]... DISCK suggest 46.25." At 9:27am, Hwang instructs "WILL/DAIKI: LET'S USE 67 FOR VIAC, 56 FOR DA AND 46.75 FOR DK." At 9:39am, Hwang adjusts those to 65.50 for VIAC, 53 for DISCA, and 44.50 for DISCK 44.5. At 9:44am, Hwang lowers them further to 64 for VIAC, 51.75 for DISCA, and 43 for DISCK, explaining that he "JUST WANTED TO GET THE SELLERS FLUSH[ED] OUT."

104. For the rest of the day, Archegos raised their limits gradually before raising them further toward the end of the trading day. At 3:19, Hwang increased VIAC to 65 and at 3:52 (with eight minutes left in the trading day) increased DISCA and DISCK to 53.00 and 44.50, respectively, reporting at closing limits of 65 for VIAC, 53.50 for DISCA, and 45.00 for DISCK.

105. The intraday charts below show that all the stocks rose (especially in late-day trading), with the exception of VIAC. On net, it appears that Archegos experienced gains from these stocks of around \$1.3 billion dollars on February 23, 2021.

APPROVAL AND SIGNATURE

I hereby approve this supplemental disclosure of my qualifications, anticipated opinions, and basis for such opinions, as set forth above.



Joseph Mason, Ph.D.